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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,375	05/23/2006	Walter Stieglbauer	STIEGLBAUER ET AL 5 PCT	2072
25889 7590 COLLARD & ROE, P.			EXAMINER	
1077 NORTHERN BOULEVARD			NGUYEN, HUNG D	
ROSLYN, NY	115/6		ART UNIT	PAPER NUMBER
			3742	
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			02/02/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
	10/580,375	STIEGLBAUER ET AL.	
Office Action Summary	Examiner	Art Unit	
	HUNG NGUYEN	3742	
The MAILING DATE of this communication a	ppears on the cover sheet w	th the correspondence address	
Period for Reply	N V IO OFT TO EVENE AM		
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNION 1.136(a). In no event, however, may a look will apply and will expire SIX (6) MONute, cause the application to become AF	CATION.  eply be timely filed  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 24 2a) This action is FINAL. 2b) Th 3) Since this application is in condition for allow closed in accordance with the practice under	nis action is non-final.  vance except for formal matt		
Disposition of Claims			
4) ☐ Claim(s) 1-6 and 8-20 is/are pending in the a 4a) Of the above claim(s) is/are withdr 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-6 and 8-20 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.		
Application Papers			
9) The specification is objected to by the Examination The drawing(s) filed on is/are: a) and a specificant may not request that any objection to the Replacement drawing sheet(s) including the correction.  The oath or declaration is objected to by the I	ccepted or b) objected to ne drawing(s) be held in abeyar ection is required if the drawing	ce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a list	nts have been received. nts have been received in A iority documents have been eau (PCT Rule 17.2(a)).	pplication No received in this National Stage	
Attachment(s)	_		
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO/SB/08)         <ul> <li>Paper No(s)/Mail Date</li> </ul> </li> </ol>	Paper No(	tummary (PTO-413) s)/Mail Date nformal Patent Application 	

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-6, 8-9, 14, 16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kilabarda et al. (US pat. 6,911,616) (previously cited) in view of Nishimura (JP Pat. 05192774) (cited by applicant).
- 3. Regarding claim 1, Kilabarda et al. discloses a welding gun (Fig. 1) for the resistance welding of workpieces, including a base body 14 (Fig. 1) and a bracket 48 (Fig. 1) on which electrode holders 38b, 48b (Fig. 1) carrying electrode 44 and 52 (Fig. 1) are arranged, wherein at least one electrode holder 38b (Fig. 1) is fastened to an actuating means 34 (Fig. 1) via which the electrode holder 38b (Fig. 1) fastened thereto is displaceable together with one of the electrode 44 (Fig. 1) in the longitudinal direction to a further one of the electrodes 52 (Fig. 1).

Kilabarda does not disclose a winding device including an associated strip is each provided for the protection of an associated of the electrodes, one winding device being arranged on the bracket mounted on the base body and another winding device being arranged on the actuating means, each strip being arranged to be displaceable relative to the associated electrode between the contact surface of the electrode and

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the workpiece, and wherein the winding device associated with the displaceable electrode is connected with the displaceable electrode so as to follow a longitudinal movement of said electrode, wherein the electrode holders and the electrodes comprise means for guiding the strip from the winding device axially along the electrode holder to

the electrode and again axially along the electrode holder back to the winding device.

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However, Nishimura discloses an electrode protective device for resistance spot welding with the winding devices 22, 23, 52, and 53 (Fig. 3 and 4) including an associated strip 21(Fig. 1) and 51 (Fig. 2) is each provided for the protection of an associated electrode 5 and 7 (Fig. 1) of the electrode, one winding device 61 (Fig. 2) being arranged on the bracket 1 (Fig. 2) mounted on the base body and another winding device 31 (Fig. 2) being arranged on the actuating means (Par. 14), each strip being arranged to be displaceable relative to the electrode between the contact surface of the electrode and the workpiece 10 (Fig. 8) and the winding device 22, 23, 52, and 53 (Fig. 3 and 4) associated with the displaceable electrode 5 and 7 (Fig. 1) is connected with the displaceable electrode so as to follow a longitudinal movement of said electrode, wherein the electrode holders 4 and 6 (Fig. 1) and the electrodes 5 and 7 (Fig. 1) comprise means for guiding the strip from the winding device axially along the electrode holder to the electrode and again axially along the electrode holder back to the winding device. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Kilabarda et al., a winding device including an associated strip is each provided for the protection of an associated of the electrodes, one winding device being arranged on the bracket mounted on the base

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body and another winding device being arranged on the actuating means, each strip being arranged to be displaceable relative to the associated electrode between the contact surface of the electrode and the workpiece, and wherein the winding device associated with the displaceable electrode is connected with the displaceable electrode so as to follow a longitudinal movement of said electrode, wherein the electrode holders and the electrodes comprise means for guiding the strip from the winding device axially along the electrode holder to the electrode and again axially along the electrode holder back to the winding device, as taught by Nishimura, for the purpose of protecting the electrode tip.

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4. Regarding claim 2, Kilabarda et al. discloses all the claimed features as set forth above **except** for each winding device comprises a wind-off roller and a wind-up roller for the guidance of the strip to the electrode and back again to the winding device. Nishimura disclose a protection device for electrode in resistance spot welding with the winding device 31 and 61 (Fig. 1) includes a wind-off roller 22 (Fig. 3), 52 (Fig. 4) and a wind-up roller 23 (Fig. 3), 53 (Fig. 4) for the guidance 41 and 71 (Fig. 1) of the strip 21 and 51 (Fig. 1) to the electrode and back again to the winding device. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Kilabarda et al., the winding device comprises a wind-off roller and a wind-up roller for the guidance of the associated strip to the associated electrode and back again to the winding device, as taught by Nishimura, for the purpose of protecting the electrode tip.

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5. Regarding claim 3, Kilabarda et al. discloses all the claimed features as set forth above **except** for the wind-off roller and/or the wind-up roller are coupled with a driving means as set forth above. Nishimura discloses a protection device for electrode in resistance spot welding with a wind-off roller 22 (Fig. 3), 52 (Fig. 4) and a wind-up roller 23 (Fig. 3), 53 (Fig. 4) are couple with the driving mean 6 and 31 (Fig. 1) (Par. 25 and 26). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Kilabarda et al., the wind-off roller and/or the wind-up roller are coupled with a driving means, as taught by Nishimura, for the purpose of protecting the electrode tip.

- 6. Regarding claim 4, Kilabarda et al. discloses all the claimed features as set forth above **except** for the driving means comprise of an electronically controllable motor as set forth above. Nishimura teaches a protection device for electrode in resistance spot welding with the driving mean 6 and 31 (Fig. 1) are driven by the stepping motor 32 and 62 (Fig. 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Kilabarda et al., the driving means comprises of an electronically controllable motor, as taught by Nishimura, for the purpose of protecting the electrode tip.
- 7. Regarding claim 5, Kilabarda et al. discloses all the claimed features as set forth above **except** for a braking device is provided for the strip to keep the strip tight.

  Nishimura discloses a protection device for electrode in resistance spot welding with the torque sensor 33 and 63 (Fig. 1) are connected with the output shaft 34 and 64 (Fig. 1) of the stepping motor 32 and 62 (Fig. 1). Par. 27-28 further explained the rolling-up of

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the band to keep it intact with the electrode. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Kilabarda et al., a braking device is provided for the strip to keep each strip tight, as taught by Nishimura, for the purpose of protecting the electrode tip.

- 8. Regarding claim 6, Kilabarda et al. discloses all the claimed features as set forth above **except** for the braking device is controllable by a control device. Nishimura discloses a protection device for electrode in resistance spot welding with the rolling-up 31 and 61 (Fig. 1) are driven by the stepping motor 32 and 62 (Fig. 5) are controlled by the control mean 81 (Fig.5). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Kilabarda et al., the braking device is controllable by a control device, as taught by Nishimura, for the purpose of protecting the electrode tip.
- 9. Regarding claim 8, Kilabarda et al. further discloses a welding gun (Fig. 1) wherein the bracket 48 (Fig. 1) has a C-shaped configuration.
- 10. Regarding claim 9, Kilabarda et al. further discloses the actuating means 34 comprises of a hydraulically, pneumatically or electromotorically controllable drive (Col. 2, Lines 58-60).
- 11. Regarding claim 14, Kilabarda et al. discloses all the claim features as set forth above **except** for a winding device is rigidly arranged on the bracket. Nishimura discloses a protection device for electrode in resistance spot welding where the wind-off roller 22 (Fig. 3) and a wind-up roller 23 (Fig. 3) are rigidly arranged on the bracket (See Fig. 2). Therefore, it would have been obvious to one of ordinary skill in the art at the

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time of the invention was made to utilize in Kilabarda et al., a winding device is rigidly arranged on the bracket, as taught by Nishimura, for the purpose of protecting the electrode tip.

- 12. Regarding claim 16, Kilabarda et al. discloses all the claim features as set forth above **except** for the winding device arranged on the bracket is arranged on the side opposite the electrode. Nishimura discloses a protection device for electrode in resistance spot welding where the wind-off roller 22 (Fig. 3) and a wind-up roller 23 (Fig. 3) are arranged on the bracket (Fig. 2) on the side and opposite to the electrode (Fig.
- 3). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Kilabarda et al., the winding device arranged on the bracket is arranged on the side opposite the electrode, as taught by Nishimura, for the purpose of protecting the electrode tip.
- 13. Regarding claim 18, Kilabarda et al. further discloses an actuating element 34 (Fig. 1) is arranged on the bracket 20 (Fig. 2), via which the electrode holder 38b (Fig. 1) fastened thereto, together with the electrode 44 (Fig. 1), is displaceable in the longitudinal direction to the further electrode 52 (Fig. 1).
- 14. Regarding claim 19, Kilabarda et al. further discloses the actuating element is comprised of a cylinder 74 (Fig. 1) and a piston as well as a piston rod 76 (Fig. 1) positively connected with the former are arranged within the cylinder 74 (Fig. 1) (Col. 2, Lines 58-60).

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15. Regarding claim 20, Kilabarda et al. further discloses the bracket 48 (Fig. 1) is arranged to be displaceable via an actuating means 34 (Fig. 1) arranged in the base body 14 (Fig. 1).

- 16. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kilabarda et al. (US Pat. 6,911,616) in view of Nishimura (JP Pat. 05192774) and further view of Humblot (US Pat. 4,481,401) (previously cited).
- 17. Regarding claim 10, Kilabarda/Nishimura disclose all the claim features as set forth above, including Kilabarda, the drive comprises a cylinder 334 (Fig. 1) comprising of a cylinder jacket 74 (Fig. 1), a piston and a throughgoing piston rod 76 (Fig. 10) (Col. 2, Lines 58-60) **except** for the winding device together with the strip is adjustable via the piston and the through going piston rod, respectively. Humblot discloses a process for welding coated plates where the winding devices 53, 54 (Fig. 2) together with the strip 59 (Fig. 2) is adjustable via a piston 3, 4 (Fig. 2) and the through going piston rod (Fig. 2). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Kilabarda/Nishimura, the winding device together with the strip is adjustable via the piston and the through going piston rod, respectively, as taught by Humblot, for the purpose of protecting the electrode tip.
- 18. Regarding claims 11 and 13, the Kilabarda/Nishimura disclose all the claimed features as set forth above **except** for the piston rod comprises a guide which is provided axially to the piston rod for guiding the strip. Humblot discloses a process for welding coated plates where a guide 72, 73 (Fig. 7) provided axially to the piston rod for guiding the strip 59 (Fig. 2). It would have been obvious to one of ordinary skill in the

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art at the time of the invention was made to utilize in Kilabarda/Nishimura, the piston rod comprises a guide which is provided axially to the piston rod for guiding the strip, as taught by Humblot, for the purpose of protecting the electrode tip.

- 19. Regarding claim 12, Kilabarda/Nishimura disclose all the claimed features as set forth above **except** for the winding device arranged on the actuating means is arranged on the piston rod on the side opposite the electrode. Humblot discloses a process for welding coated plates where the winding devices 53 (Fig. 2) arranged on the actuating means is arranged on the piston rod (Fig. 2) on the site opposite the electrode 2 (Fig. 2). It would have been obvious to one of ordinary skill in the art at the time of the
- invention was made to utilize in Kilabarda/Nishimura, the winding device is arranged on the piston rod on the side opposite the electrode, as taught by Humblot, for the purpose of protecting the electrode tip.
- 20. Claims 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kilabarda et al. (US Pat. 6,911,616) in view of Nishimura (JP Pat. 05192774) and further view of Eckler et al. (US Pat. 3,015,713) (previously cited).
- 21. Regarding claims 15 and 17, Kilabarda/Nishimura disclose all the claimed features as set forth above **except** for the bracket comprises a bore provided axially to the electrode for guiding the strip. Eckler et al. discloses an automatic decontamination of welding electrode where the bracket 15 (Fig. 1) comprises a bore provided axially to the electrode 13 (Fig. 1) for guiding the strip 24 (Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in

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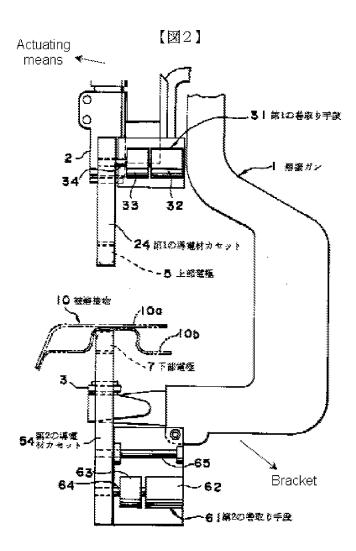
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Kilabarda/Nishimura, the bracket comprises a bore provided axially to the electrode for guiding the strip, as taught by Eckler, for the purpose of protecting the electrode tip.

## Response to Remarks/Arguments

22. Applicant's arguments filed 8/24/2009 have been fully considered but they are not persuasive. The applicant argues "There is no disclosure or suggestion of a winding device for one electrode arranged on a bracket mounted on a base body and another winding device for the other electrode arranged on an actuating means as recited in Applicants' claim 1 as amended "on page 13 of the Remarks/Arguments. The examiner disagrees. Per Merriam-Webster's online definition, "arrange" means to put into proper order and "on" is means for used as a functional word to indicate the location of something ". Therefore, the term "arrange on" means put into proper location or place. Nishimura clearly shows a winding device 61 (Fig. 2 below) arranged on a bracket 1 (Fig. 2 below) and it is inherently that the bracket must mounted on a base body of the welding apparatus; and another winding device 31 (Fig. 2 below) arranged on the actuating means (Fig. 2 below), the term "actuating means" is the mechanical action or motion of the upper electrode 5 (Fig. 2 below) moves up and down (Par. 33). Therefore, Nishimura meets the claimed limitation of the amended claim 1. Kilabarda et al. and Nishimura references are both related to the same technical fields and one ordinary skill in the art would combine these references.

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23. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG NGUYEN whose telephone number is (571)270-7828. The examiner can normally be reached on Monday-Friday, 9M-6PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on (571)272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner, Art Unit 3742 1/28/2010

Primary Examiner, Art Unit 3742